AMENDMENTS TO THE CLAIMS

1. (Currently amended) A biologically active peptide ~~consisting essentially of~~ comprising the formula ~~selected from~~:

~~(a)~~ X_{01}ValX$_{02}$GluIleGlnLeuMetHisX$_{03}$X$_{04}$X$_{05}$X$_{06}$X$_{07}$ (SEQ. ID. NO. 1);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12, or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

(d) an N- or C-~~derivatives of (a), (b) or (c)~~ derivative thereof;

wherein:

X_{01} is an α-helix-stabilizing residue, Gly, Ser or Ala;

X_{02} is an α-helix-stabilizing residue, Ala or Ser;

X_{03} is Ala, Gln or Asn;

X_{04} is Arg, Har or Leu;

X_{05} is an α-helix stabilizing residue, Ala or Gly;

X_{06} is an α-helix stabilizing residue or Lys;

X_{07} is an α-helix stabilizing residue, Trp or His;

wherein at least one of X_{01}, X_{02}, X_{05}, X_{06} or X_{07} is an α-helix stabilizing residue, and wherein at least one of said α-helix stabilizing residues is ~~Aib, Ac$_3$c,~~ Ac$_4$c ~~, Ac$_5$c,~~ or Ac$_6$c~~, or Deg~~.

2-26. (Cancelled)

27. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac$_4$cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 7);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ thereof; or

~~(d)~~ an N- or C-~~derivatives (a), (b) or (c)~~ derivative thereof.

28. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac_6cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 8);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

~~(d)~~ an N- or C-~~derivatives of (a), (b) or (c)~~ derivative thereof.

29. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac_5cValAc$_4$cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 9);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

~~(d)~~ an N- or C-~~derivatives (a), (b) or (c)~~ derivative thereof.

30. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac_5cValAc$_6$cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 10);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

~~(d)~~ an N- or C-~~derivatives of (a), (b) or (c)~~ derivative thereof.

31. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac_4cValAc_4cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 11);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

~~(d)~~ an N- or C-~~derivatives of (a), (b) or (c)~~ derivative thereof.

32. (Currently amended) The peptide of claim ~~26~~ 1, wherein said peptide ~~is selected from~~ comprises:

~~(a)~~ Ac_6cValAc_6cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 12);

~~(b) peptides~~ a fragment thereof containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;

~~(c)~~ a pharmaceutically acceptable ~~salts of (a) or (b)~~ salt thereof; or

~~(d)~~ an N- or C-~~derivatives of (a), (b) or (c)~~ derivative thereof.

33. (Previously presented) The peptide of claim 1, wherein said peptide is labeled with a label selected from the group consisting of a fluorescent label, a chemiluminescent label, a bioluminescent label and a radioactive label.

34. (Previously presented) The peptide of claim 1, wherein said peptide is labeled with ^{125}I.

35. (Previously presented) The peptide of claim 1, wherein said peptide is labeled with ^{99m}Tc.

36. (Previously presented) A pharmaceutical composition comprising the biologically active peptide of claim 1, and a pharmaceutically acceptable carrier.

37. (Currently amended) A method for treating a mammalian subject having a condition ~~conditions~~ characterized by ~~decreases~~ a decrease in bone mass, said method comprising administering to ~~a~~ said subject in need thereof an effective bone-mass increasing amount of the biologically active peptide of claim 1.

38. (Currently amended) A method for treating a mammalian subject having a condition ~~conditions~~ characterized by ~~decreases~~ a decrease in bone mass, said method comprising administering to ~~a~~ said subject in need thereof an effective bone mass-increasing amount of a composition comprising the biologically active peptide of claim 1 and a pharmaceutically acceptable carrier.

39. (Currently amended) A method for determining rates of bone reformation, bone resorption and/or bone remodeling, said method comprising administering to a patient an effective amount of the peptide of claim 1 and determining the uptake of said peptide into the bone of said patient.

40. (Currently amended) The method of claim 37, wherein said condition to be treated is ~~hyperparathyroidism~~ osteoporosis.

41. (Currently amended) The method of claim 37, wherein said ~~condition to be treated is hypercalcemia~~ osteoporosis is postmenopausal osteoporosis or old-age osteoporosis.

42. (Original) The method of claim 37, wherein said effective amount of said peptide for increasing bone mass is from about 0.01 μg/kg/day to about 1.0 μg/kg/day.

43. (Original) The method of claim 37, wherein the method of administration is parenteral.

44. (Original) The method of claim 37, wherein the method of administration is subcutaneous.

45. (Original) The method of claim 37, wherein the method of administration is nasal insufflation.

46. (Original) The method of claim 37, wherein the method of administration is oral.

47. (Previously presented) The method of making the peptide of claim 1, wherein said peptide is synthesized by solid phase synthesis.

48. (Previously presented) The method of making the peptide of claim 1, wherein said peptide is synthesized by liquid phase synthesis.

49. (Previously presented) The method of making the peptide of claim 1, wherein said peptide is protected by FMOC.

50. (New) The peptide of claim 27, wherein said peptide consists of the amino acid sequence Ac_4cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 7), or a pharmaceutically acceptable salt thereof.

51. (New) The peptide of claim 28, wherein said peptide consists of the amino acid sequence Ac_6cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 8), or a pharmaceutically acceptable salt thereof.

52. (New) The peptide of claim 29, wherein said peptide consists of the amino acid sequence Ac_5cValAc_4cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 9), or a pharmaceutically acceptable salt thereof.

53. (New) The peptide of claim 30, wherein said peptide consists of the amino acid sequence Ac_5cValAc_6cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 10), or a pharmaceutically acceptable salt thereof.

54. (New) The peptide of claim 31, wherein said peptide consists of the amino acid sequence Ac_4cValAc_4cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 11), or a pharmaceutically acceptable salt thereof.

55. (New) The peptide of claim 32, wherein said peptide consists of the amino acid sequence Ac_6cValAc_6cGluIleGlnLeuMetHisGlnHarAlaLysTrp (SEQ. ID. NO. 12), or a pharmaceutically acceptable salt thereof.

56. (New) The peptide of claim 1, wherein said peptide is amidated.